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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/592,009	06/12/2000	Sherman Lee	M-8815 US	4198

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CHRISTIE, PARKER & HALE, LLP
PO BOX 7068
PASADENA, CA 91109-7068

EXAMINER

HUYNH, KIM NGOC

ART UNIT	PAPER NUMBER
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2182

DATE MAILED: 02/09/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/592,009

Applicant(s)

LEE ET AL.

Examiner

Kim Huynh

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 June 2000.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12 June 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 1 sheet.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Specification

1. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

2. The abstract of the disclosure is objected to because the abstract is not a single paragraph. Correction is required. See MPEP § 608.01(b).
3. The specification is replete with instances where applicant "incorporate by reference" of unidentified US patent application. The manner of such incorporation by reference is improper.

Please note also that incorporation by reference only applies to US patents or US patent application publications not unpublished pending application per 37 CFR 1.57(c).

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

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The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims ^{1, 7, 9, 12, 13, 14} ~~1-14~~ are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

a. Claim 1 recites a method of performing a context switch operation having the acts of accessing and receiving context data and index values. It is unclear what/who actually performs the accessing and receiving acts and how the act of accessing/receiving such values performs the context switching operation.

Claims 3-6 also recite a number of receiving and writing/reading steps without clearly reciting the originator/recipient associated with those steps.

The claim as recited is not self consistent to enable the understanding of the claimed invention. Although the specification provides a dictionary for the claims, and the claims may be broader than the specification, the claims must be complete and self consistent so that the functional relationships between all of the elements/steps are clearly recited.

b. Claim 9, "the context registers" lacks antecedent basis.

c. Claim 12, it is unclear if "a register access circuit" of claim 12 is the same for different from the "register access circuit" previously recited in claim 8. It is also unclear how an "address portion" can comprise a "register access circuit".

d. Claim 13 recites the peripheral system includes a plurality of "context registers" associated with the plurality of index values. It is unclear how the "context registers" recited herein relate to the first and second registers recited in claim 8.

e. Claim 14 recites an "index register", it is unclear of the nexus between this register and the rest of the elements recited in claim 8 such as the host, the register access circuit and the index values.

Correction/clarification required.

6. The following rejections are made based on the examiner's best interpretation of the claims in light of the 35 USC 112 rejections above.

Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

8. Claims 1 and 3-14 are rejected under 35 U.S.C. 102(e) as being anticipated by over Born et al. (US 6,247,040).

Claims 1 and 8, 12, Born discloses a method and apparatus for performing context switching having a peripheral device 100, interfacing with a host 140 via an interface 150 (Fig. 1) wherein the peripheral device 100 having context registers (204-216, see Fig. 2 and its description), wherein each of the register is associated with an index value sent from the host (command contexts refers to all information required to process a single command within the controller of the target device, including address

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pointer and counter refer to disk channels and buffer memory on behalf of a command from a host device, col. 6, ll. 6-55), a register access circuit (buffer manager 112) for accessing the first and second register provided by the host.

Claims 3-6, Born discloses accessing context data including receiving an address value identifies the address within the register (address counters pointers provided by the host channel transfer or disk channel, col. 6, ll. 9-19), control input identifies read/write function (read/write command), and providing the content of the register (read command) or writing the data to the register (write command).

Claims 7 and 9, Born discloses the context registered are within the context management module (special purpose vs. architected registers).

Claims 10-11, the peripheral system includes an address, control, microprocessor and data portions (address pointer/counters, program memory 102, DMA 106, memory), the data portion includes the first and second registers (memory including buffers and registers).

Claim 13, Born discloses the plurality of context registers associated with a plurality of index values (each SCSI command includes a target device value and SCSI command descriptor block generated by the host command, col. 1. ll. 40-67 and is associated/ translated into physical storage/retrieval information by the disk controller).

Claim 14, since the index register of claim 14 is not limiting, it could be interpreted as any register associated with the memory system of the peripheral device.

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Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claim 2 rejected under 35 U.S.C. 103(a) as being unpatentable over applicant Born in view of admitted prior art.

Born discloses the context data being device address on a network, and active member address (target being addressed) but does not disclose the context data being class value or clock offset values. As disclosed by applicant and well known in the art to utilize wireless communication among the electronic devices by utilizing Bluetooth communication to eliminate the need of buying or carrying cables for connecting between the devices. Bluetooth is aimed at simplifying communications and data synchronization among the electronic devices and includes clock offset and class value in its protocol. Born discloses implementing the context switching register with the peripheral device in order to maximize the use of resources within the target device and avoid loss of data and (col. 2, ll. 25-52). It would have been obvious to one having ordinary skill in the art to utilize Bluetooth communication in the system of Born in order to maximize resource utilization in a wireless environment.

Conclusion

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Lindsley (US 6,128,672), Lui et al. (US 6,169,745) and Russell et al. (US 6,751,737) disclose various system for improving context switching in computer sytem.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kim Huynh whose telephone number is (571) 272-4147.

13. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

14. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Kim Huynh
Primary Examiner
Art Unit 2182

KH
2/3/05